ABSTRACT OF THE DISCLOSURE

The present invention provides a layered composite, which includes the following layers:

(I) a layer I composition including:

(a) from 0 to 80 parts by weight of at least one polyamide selected from the group including PA6, PA66, PA6/66 and mixtures thereof;

(b) from 0 to 100 parts by weight of at least one polyamine-polyamide copolymer that includes the following monomer units:

(α) from 0.5 to 25% by weight, based on the weight of the polyamine-polyamide copolymer, of at least one polyamine having at least 4 nitrogen atoms and having a number-average molar mass M_n of at least 146 g/mol, and

(β) at least one polyamide-forming monomer selected from the group including lactam, ω-aminocarboxylic acid, equimolar combination of diamine and dicarboxylic acid, and mixtures thereof; and

(c) from 0 to 80 parts by weight of at least one polyamide selected from the group including PA11, PA12, PA612, PA1012, PA1212 and mixtures thereof;

wherein, in the layer I, a total of the parts by weight of (a), (b) and (c) is 100;

wherein within an entirety of (a) and (b), at least 20 parts by weight of the entirety include monomer units selected from the group including caprolactam, combination of hexamethylenediamine/adipic acid, and mixtures thereof; and

wherein within an entirety of (b) and (c), at least 20 parts by weight of the entirety include monomer units selected from the group including ω-aminoundecanoic acid, laurolactam, combination of hexamethylenediamine/1,12-dodecanedioic acid, combination of 1,10-decanediamine/1,12-dodecanedioic acid, combination of 1,12-dodecanediamine/1,12-dodecanedioic acid, and mixtures thereof; and

(II) a layer II composition which includes at least one ethylene-vinyl alcohol copolymer.